AMENDMENTS TO THE SPECIFICATION:

Page 1, please add the following new paragraphs before paragraph [0001]:

[0000.2] CROSS-REFERENCE TO RELATED APPLICATIONS

[0000.4] This application is a 35 USC 371 application of PCT/DE 2004/001982 filed on September 7, 2004.

[0000.6] BACKGROUND OF THE INVENTION

Please replace paragraph [0002] with the following amended paragraph:

[0002] **Fuel injectors are known for** [[For]] supplying the combustion chambers of internal combustion engines with fuel[[,]] ~~fuel injectors are used~~. Particularly in self-igniting internal combustion engines, the injection pressure is furnished via a high-pressure reservoir. Because of the large fuel volume in the high-pressure reservoir, compared to the injection quantity, pressure fluctuations during the injection event are avoided. The operation of the fuel injectors is effected hydraulically with the fuel furnished via the high-pressure reservoir.

Please replace paragraph [0003] with the following amended paragraph:

[0003] ~~Background of the Invention~~ **Description of the Prior Art**

Please replace paragraph [0004] with the following amended paragraph:

[0004] Fuel injectors of the kind used in the prior art for high-pressure reservoir systems are known for instance from Mollenhauer, Handbuch Dieselmotoren [Diesel Engine Manual], 2nd Ed., Springer Verlag, Berlin, 2002. In fuel injectors for high-pressure reservoir systems, both the opening and the closing events are controlled hydraulically. To that end, a control chamber, in which fuel is located at injection pressure, is closed by a control valve. The fuel pressure [[acts]] **moves** on the backside of a control piston that acts into the control chamber,

and on a pressure shoulder of an injection valve member that closes injection openings. The hydraulic force on the backside of the control piston is counter to the hydraulic force that acts on the pressure shoulder. Because of the larger area of the control piston, the nozzle remains closed. As soon as the control valve opens the control chamber, the pressure in the control chamber is diminished, and the hydraulic force on the pressure shoulder becomes greater than the pressure force acting on the backside of the control piston. As a result, the injection valve member opens.

Page 2, please replace paragraph [0006] with the following amended paragraph:

[0006] ~~Summary of the Invention~~ **SUMMARY OF THE INVENTION**

Page 7, please replace paragraph [0019] with the following amended paragraph:

[0019] ~~Drawing~~ **BRIEF DESCRIPTION OF THE DRAWING**

Please replace paragraph [0020] with the following amended paragraph:

[0020] The invention is described in further detail below in conjunction with **the single figure which schematically shows a section through a fuel injector embodied according to the invention** ~~a drawing~~.

Please delete paragraph [0021].

Please replace paragraph [0022] with the following amended paragraph:

[0022] ~~Variant Embodiments~~

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please delete paragraph [0023].

Page 10, please replace paragraph [0030] with the following amended paragraph:

[0030] The operation of the fuel injector 1 is effected hydraulically with fuel that is at system pressure. The fuel is furnished by the high-pressure fuel reservoir 5. Via the fuel supply line 7, the fuel flows into an annular chamber 44 that surrounds the piezoelectric actuator 43. Via a gap 45 between the pressure booster 8 and the inner wall 33 of the injector housing part 14, the fuel, which is at system pressure, reaches the first spring chamber 32. Via the at least one groove 34, the grooves 35 in the shoulder 31 of the nozzle housing part 15, and the annular gap 36, the fuel flows into the second spring chamber 39. From there, along the at least one ground and polished surface 40, the fuel reaches the ~~nozzle~~ **pressure** chamber 41. Because of the hydraulic connections among the annular chamber 44, the first spring chamber 32, the second spring chamber 39, and the pressure chamber 41, system pressure prevails both in the annular chamber 44 and in the first spring chamber 32, second spring chamber 39, and pressure chamber 41. The system pressure is preferably in the range from 1300 to 1600 bar.

Please replace paragraph [0031] with the following amended paragraph:

[0031] Because of the large fuel volume, in comparison to the injection quantity, in the high-pressure fuel reservoir 5, the pressure in the annular chamber 44, first spring chamber 32, second spring chamber 39, and pressure chamber 41 remains **essentially** constant even during operation of the fuel injector 1.

Page 11, please replace paragraph [0033] with the following amended paragraph:

[0033] For injecting fuel into the combustion chamber 52 of the engine, the current supply to the piezoelectric actuator 43 is cancelled. As a result, the piezoelectric crystals contract and

the piezoelectric actuator 43 shrinks. Reinforced by the spring force exerted by the spring element 27, the pressure booster 8 moves in the direction of motion marked by the arrow 46. As a result, the lower end face 47 of the pressure booster 8 moves out of the booster chamber 20, causing its volume to increase. Because of the increasing volume of the booster chamber 20, the pressure in the booster chamber 20 decreases. Since the pressure in the booster chamber 20 drops below the system pressure in this case, it is necessary that the connection between the sleeve 19 and the shoulder 22 in the booster housing 9 be pressure-tight. The filling of the booster chamber 20 is effected by reference leakage between the booster housing 9 and the pressure booster 8, and between the inside [[43]] **53** of the sleeve 19 and the booster portion 11 of the injection valve member 10.

Page 12, please replace paragraph [0034] with the following amended paragraph:

[0034] Because of the decreasing pressure in the booster chamber 20 when current is not being supplied to the piezoelectric actuator 43, the hydraulic force acting on the end face [[38]] **48** of the booster portion 11 of the injection valve member 10 drops. As soon as the hydraulic force acting on the first pressure step 49, second pressure step 50 and third pressure step 51 is greater than the hydraulic force on the end face [[38]] **48** and the spring force of the spring element [[34]] **24**, the injection valve member 10 lifts out of the sealing edge 17 and thus uncovers the at least one injection opening 16. Fuel now flows out of the pressure chamber 41 into the combustion chamber 52, via the injection opening 16.

Please replace paragraph [0035] with the following amended paragraph:

[0035] For closing the at least one injection opening 16, current is supplied again to the piezoelectric actuator 43. The piezoelectric crystals expand as a result, and the piezoelectric actuator 43 lengthens. As a result, the pressure booster 8 again moves into the booster chamber 20, counter to the direction of motion indicated by the arrow 46, causing the volume of the booster chamber 20 to decrease. This in turn causes the pressure in the booster chamber 20 to increase and with it the hydraulic force acting on the end face [[43]] **48** of the booster portion 11 of the injection valve member 10. At the same time, the hydraulic force acting on the first pressure step 49, second pressure step 50, and third pressure step 51 remains constant, since the second spring chamber 39 and the pressure chamber 41 are acted upon by the system pressure, which remains constant. As soon as the spring force of the spring element 24 acting on the ring 25 [[and]] **combined with** the hydraulic force that acts on the end face 48 of the booster portion 11 of the injection valve member 10 is greater than the hydraulic force acting on the first pressure step 49, second pressure step 50, and third pressure step 51, the injection valve member 10 moves in the direction of the at least one injection opening 16 and is pressed against the sealing edge 17. As a result, the at least one injection opening 16 is closed, and the injection event into the combustion chamber 52 is ended.

Please add the following new paragraph after paragraph [0035]:

[0036] The foregoing relates to a preferred exemplary embodiment of the invention, it being understood that other variants and embodiments thereof are possible within the spirit and scope of the invention, the latter being defined by the appended claims.